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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,208	07/29/2003	Eiji Ozawa	8373.311US01	5663
7590 05/12/2006			EXAMINER	
Hamre, Schumann, Mueller & Larson, P.C. P. O. Box 2902-0902 Minneapolis, MN 55402			COOLMAN, VAUGHN	
			ART UNIT	PAPER NUMBER
			3618	
DATE MAILED: 05/12/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/629,208	OZAWA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Vaughn T. Coolman	3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-15 and 17-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-15 and 17-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                                        | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

**Examiner note:** The new examiner of record is Vaughn Travis Coolman, contact information can be found in the conclusion section of this office action.

### ***Claim Objections***

Claim 22 is objected to because of the following informalities:

There seems to be a double inclusion of limitations in lines 10-13 and 14-15.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The language of claim 6, specifically, the phrase “opened at opposite sides thereof” is confusing to the examiner. Furthermore, the term “passenger seats” is either a typo or is lacking antecedent basis, as only one passenger seat is claimed in the parent claim, claim 1.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

**Claims 1, 2, 6, 7, 8, 10, 12, 13, 19, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al (U.S. Patent No. 6,755,269 B1) in view of Hirano et al (U.S. Patent No. 4,506,754).**

**[claim 1]** Davis (see FIGS 1-11) discloses a four-wheeled vehicle (30) comprising:

- a steering mechanism having a bar handle (41);
- a front part having right and left front wheels (34 and 36);
- a rear part having right and left rear wheels (38 and 40);
- a driver's seat (86) disposed at said front part;
- a rear passenger seat (88) disposed behind said driver's seat with a backrest (90)

for the driver therebetween and the rear passenger seat facing forwardly.

Davis further shows in FIG 3 the front and rear wheels defining a straight line at a level extending in a longitudinal direction through the uppermost points of the front and rear wheels. Davis does not show the driver's seat disposed at substantially the same level as the straight line described above or the rear passenger seat being disposed at a higher level than the driver's seat.

However, Hirano teaches a seating configuration for a vehicle wherein the driver's seat (50) is disposed at substantially the same level as a straight line defined by the uppermost points of the front and rear wheels. Furthermore, Hirano shows in a side view, more of the driver's seat is located below the straight line than above it and some of the driver's seat is also located above the straight line. Hirano also shows a passenger seat (64, column 3, lines 5-9) being disposed at

a higher level than the driver's seat. It is obvious that in lowering the seat from a conventional height as taught by Hirano, it would result in the vehicle with driver and passenger maintaining a low center of gravity and the passenger would also have a better view of the path that the vehicle was traversing due to an elevated position relative to the driver.

Hirano is considered analogous art because both Davis and Hirano teach straddle-type vehicles. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis with the seat location as taught by Hirano, since such a modification would provide the advantage of a more relaxed and comfortable seating position.

**[claim 2]** Davis further shows the driver's seat including a front part having driver's footrests (66, 68) provided at opposite sides thereof, said driver's seat being formed to allow a driver to sit astride thereon with his feet rested on said footrests (shown in FIG 3).

**[claim 6]** Davis further shows said driver's seat and said rear passenger seats being opened at opposite sides thereof. As best understood by the examiner, the term "opened" is defined by the applicant as being able to enter/straddle the seat from the "opened" area.

**[claim 7]** Davis further shows the driver's seat and said rear passenger seat being formed to allow passengers to sit astride thereon (shown in FIG 3).

**[claim 8]** Davis further shows (FIG 6) the driver's seat being positioned at substantially the same level as said rear passenger seat.

**[claim 10]** Hirano further shows a front cover (80) and a windshield (82) disposed in front of the bar handle (70) of his vehicle, and a body cover disposed behind and below said driver's seat (shown in FIG 1).

**[claim 12]** Davis further shows (FIG 9) a power unit (122) part disposed below one of said driver's seat and said rear passenger seat, said power unit part including a torque converter mechanism (126).

**[claim 13]** Davis further shows the power unit part further including a transmission mechanism (128) for transmitting an output from said torque converter mechanism to said right and left rear wheels to drive said right and left rear wheels.

**[claim 19]** Davis further shows (FIG 11) a power unit part (148) disposed below said rear passenger seat, said front wheel and said rear wheel providing a straight line extending through the vicinities of uppermost points thereof, said power unit part being disposed below said straight line. Examiner notes that Davis is silent as to the explicit orientation of the engine with respect to the frame; however, FIG 2 appears show the front and rear portions of the frame as being mirror images. It would have been obvious to orient the engine in either a more forward or more rearward location depending on specific longitudinal center of gravity locations such as the weight of the steering assembly or exhaust system. Examiner also notes that the term "vicinity" is being interpreted reasonably broad as defined by Merriam Webster's Tenth online dictionary as "the quality or state of being near". Additionally, the term "below" is being interpreted reasonably broad as defined by Merriam Webster's Tenth online dictionary as "lower in place than".

**[claim 24]** Davis in view of Hirano discloses all of the elements of the claimed invention as described above in re claim 1. Furthermore, the four-wheeled vehicle is disclosed by Davis as having substantially the same overall length as a motorcycle, and a width substantially half the overall length (Column 1, lines 56-60). Examiner notes that a 45 inch or greater wheelbase is

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substantially the same as a motorcycle, and the track of 36 inches or greater could obviously be substantially half of the overall length. Examiner also notes that a wheelbase of 72 or greater inches for a motorcycle would not be out of the ordinary either.

**Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Hirano and further in view of Maki et al (U.S. Patent No. 6,270,106 B1).**

**[claim 3]** Davis in view of Hirano discloses all of the elements of the claimed invention as described above except for each of the footrests having a side edge projecting upwardly.

Maki teaches (FIGS 1-7) footrests (30) for a four-wheeled vehicle, each having a side edge (50) projecting upwardly. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the side edge configuration as taught by Maki, since such a modification would provide the advantage of, according to Maki, preventing the rider's foot from inadvertently slipping off of the footrest (Column 4, lines 33-35).

**[claim 4]** Davis further shows (FIG 2) the right front wheel and said right rear wheel providing a first straight line extending therethrough, said left front wheel and said left rear wheel providing a second straight line extending therethrough, and the combination with Maki would disclose said side edges being positioned within a region defined between said first and second straight lines when viewed in top plan (shown in FIG 2).

**[claim 5]** Davis further shows (FIGS 7 and 8) rear passenger's footrests being disposed behind said driver's footrests.

**Claims 9 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Hirano and further in view of CORBIN seat for 2001 HONDA Goldwing 1800.**

[claim 9] Davis in view of Hirano discloses all of the elements of the claimed invention as described above except for the rear passenger seat having bulged portions provided at opposite sides thereof for providing a larger width than the driver's seat.

The CORBIN seat specifications state that the rider [driver] seating is 17.5" wide and the passenger seating is 19" wide. The pictures provided show bulged portions on opposite sides of the rear passenger seat for providing the larger width, as described above, than the driver's seat. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the bulged portions of the rear seat as taught by CORBIN, since such a modification would provide a "generous" and comfortable seating platform for the passenger.

[claim 21] Davis in view of Hirano discloses all of the elements of the claimed invention as described above in re claim 1, except for the rear passenger seat being in the form of a bucket seat. However, referring to the individual photographs provided by the examiner, it is obvious that the rear passenger seat is in the form of a bucket seat. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the rear passenger seat form as taught by CORBIN, since such a modification would provide a more comfortable seating platform for the passenger than that disclosed by Davis or Hirano.



**Claims 14, 15, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Hirano and further in view of Hanagan et al (U.S. Patent No. 4,225,183).**

**[claim 14]** Davis in view of Hirano discloses all of the elements of the claimed invention as described above except for first side support members disposed at opposite sides of said driver's seat.

Hanagan teaches (see FIG 1) first side support members disposed at opposite sides of a driver's seat (11). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the side supports as taught by Hanagan, since such a modification would provide the advantage of lateral support for the driver during cornering maneuvers.

**[claim 15]** Davis in view of Hirano discloses all of the elements of the claimed invention as described above except for second side support members disposed at opposite sides of said rear passenger seat.

Hanagan teaches (see FIG 1) first side support members (16) disposed at opposite sides of a rear passenger seat (12). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the side supports as taught by Hanagan, since such a modification would provide the advantage of lateral support for the passenger during cornering maneuvers.

**[claim 17]** Hanagan further shows (see FIG 1) a backrest disposed behind said driver's seat (11) and united with said first side support members (shown in FIG 1).

**[claim 18]** Hanagan further shows the driver's seat (11) and said rear passenger seat (12) have a member (the backrest) disposed therebetween, said driver's seat and said rear passenger seat cooperating with each other to provide a single seat, said member being positioned at an intermediate part of said single seat (shown in FIG 1).

**Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Hirano and further in view of Toriyama et al (U.S. Patent No. 6,218,804 B1).**

**[claim 20]** Davis in view of Hirano discloses all of the elements of the claimed invention as described above including a power unit part being disposed below said rear passenger seat. Neither teaches the power unit part including a forwardly directed engine.

Toriyama, however, teaches a vehicle including a power unit part (200) being disposed below a rear passenger seat (3), wherein the power unit part includes a forwardly directed engine. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the forwardly directed engine as taught by Toriyama, since such a modification would provide the advantage of lowering the center of gravity even more than the vehicle described by Davis, which appears to show a vertical cylinder arrangement for the engine.

Examiner notes that the term “below” is being interpreted reasonably broad as defined by Merriam Webster’s Tenth online dictionary as “lower in place than”.

**Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Hirano as applied to claim 1, and further in view of Kurata (U.S. Patent No. 4,606,429).**

**[claim 22]** Davis in view of Hirano discloses all of the elements of the claimed invention as described above in re claim 1, except for the roll bars and their configuration.

Kurata teaches (see FIGS 1-3) a vehicle utilizing a similar seating configuration as that of Davis and Hirano wherein a front roll bar (7) is disposed in front of a driver's seat (14) and in an upright position; a rear roll bar (9) is disposed behind a rear passenger seat (15) and in an upright position; and said front roll bar and said rear roll bar providing a straight line extending through the vicinities of top ends thereof, said straight line having a space defined therebelow to allow a driver and a rear passenger to sit on said driver's seat and said rear passenger seat, respectively, within said space. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the vehicle shown by Davis and Hirano, with the roll bars as taught by Kurata, since such a modification would provide the advantage of protecting the passengers from head injury in the event of a rollover of the vehicle.

Examiner reminds applicant of the previous examiner's observation on pages 7 and 8, final/first paragraph respectively, wherein it was noted that the ability of a driver and passenger to sit within the space defined above is entirely dependent upon the height of each person, furthermore, sitting posture could also play a role in this limitation.

**[claim 23]** Davis further shows (FIGS 3 and 6) the backrest being positioned at the same level as the waist of the driver sitting on the driver's seat.

***Response to Arguments***

Applicant's arguments with respect to all claims have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

DeAnda (U.S. Patent No. 6,412,585 B1) and Lehman (U.S. Patent No. 6,203,043 B1) teach four-wheeled vehicles including elements of the claimed invention.

Saiki (U.S. Patent No. 4,804,221) teaches a seat including elements of the claimed invention.

Ethier (U.S. Patent Nos. 4,662,468 and 4,625,825) teaches vehicles including seats positioned similarly to the instant application and claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vaughn T. Coolman whose telephone number is (571) 272-6014. The examiner can normally be reached on Monday thru Friday, 8am-6pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Ellis can be reached on (571) 272-6914. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



05/09/06

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